

DOCKET: CU-2328

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Peter Alan Smith )  
SERIAL NO: 09/622,249 ) Group Art Unit: 3636  
FILED: August 15, 2000 ) Examiner: Edell, J. F.  
TITLE: CHAIR INCORPORATING AIR CUSHIONS

THE ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

AMENDED CLAIMS

1-21. (cancelled)

22. (previously presented) A chair of a type having a seat portion and a backrest portion, the chair comprising a seat support structure, a backrest support structure, at least one air-containing cushion positioned on the seat support structure, at least one air-containing cushion secured to the backrest support structure, a layer of compressible material overlaying the cushions, and an upholstery material covering the layer of compressible material; each cushion comprising a bladder which is formed from a pliable, gas impermeable material and each bladder being charged with an amount of air prior to use such that the amount of air is at the surrounding atmospheric pressure and displaces no more than 60% of a maximum contained volume of the bladder whereby the air may freely be displaced only within the bladder in use, wherein the seat support structure and the backrest support structure are formed as frames and wherein the cushions are suspended either directly or indirectly from the frames and wherein each bladder is adapted to underlie entirely that respective part of a user adjacent to the seat and backrest when occupying the chair, as a consequence of which

shaping may be imparted to the cushion to complement the shape of the user.

23. (previously presented) The chair as claimed in claim 22, wherein the frames carry a sheet material which supports, either directly or indirectly, the air-containing cushions.

24. (previously presented) The chair as claimed in claim 22, wherein the frames are metal.

25. (previously presented) The chair as claimed in claim 23, wherein the sheet material is a reinforced plastics sheet material.

26. (new) The chair as claimed in claim 22 wherein each bladder is charged with air prior to use such that the amount of air displaces no more than 50% of the maximum contained volume of the bladder.

27. (new) The chair as claimed in claim 22 wherein each bladder is charged with air prior to use such that the amount of air displaces between 15% and 30% of the maximum contained volume of the bladder.

28. (new) The chair as claimed in claim 22 wherein respective ones of the bladders are charged with air prior to use to different levels falling within the range 15% to 60% of the maximum contained volume of the respective bladders.

29. (new) The chair as claimed in claim 22 wherein each bladder is provided with a valve through which air is admitted to the bladder prior to use.

30. (new) The chair as claimed in claim 22 wherein each bladder has a front wall, a back wall and peripheral side walls whereby the bladder would assume a generally oblong shape if it were charged with air in an amount equal to the maximum contained volume of the bladder.

31. (new) The chair as claimed in claim 22 wherein the compressible material that overlays the cushions comprises an expanded foam plastics material sheet.

f1  
Cont

32. (new) The chair as claimed in claim 22 wherein two of the air-containing cushions are secured to the backrest support structure, one above the other.
33. (new) The chair as claimed in claim 32 wherein an upper one of the backrest support structure cushions overlaps the lower one of the backrest support cushions, and wherein the lower one of the backrest support cushions overlaps the at least one air-containing cushion positioned on the seat support structure.
34. (new) The chair as claimed in claim 33 wherein the upper one of the backrest support cushions extends over and around an upper edge of the backrest portion of the chair.
35. (new) The chair as claimed in claim 22 wherein an underlay which is formed from an expanded foam sheet material is located below the air-containing cushions.
36. (new) The chair as claimed in claim 35 wherein the underlay is formed from a material that has a higher density than that of the compressible material that overlays the cushions.
37. (new) The chair as claimed in claim 22 wherein the upholstery material is composed of a semi-permeable or vapour-permeable plastics sheet material.
38. (new) The chair as claimed in claim 22 wherein the backrest support structure is pivotably mounted with respect to the seat support structure.
39. (new) The chair as claimed in claim 22 wherein the seat support structure is mounted to a support base which is carried by wheels.
40. (new) The chair as claimed in claim 39 wherein the seat support structure is pivotably mounted with respect to the support base.
41. (new) The chair as claimed in claim 22 wherein a leg support portion is pivotably mounted with respect to the seat portion and wherein an air-

Cont

containing cushion is mounted to the leg support portion and is overlayed by both the compressible material and the upholstery material.

42. (new) The chair as claimed in claim 22 wherein the cushions are removably secured to the seat and backrest support structures by way of self-securing fastening materials.

43. (new) The chair as claimed in claim 22 wherein the upholstery material is secured in place by the use of self-securing fastening materials.